

NATIONAL HISTORIC CIVIL ENGINEERING LANDMARK



BAYONNE BRIDGE

CHIEF ENGINEER, O. H. AMMANN, HON. M. ASCE
THE PORT AUTHORITY OF NY & NJ

COMPLETED 1931

DESIGNATED 1985

In 1985, the Bayonne Bridge was designated a National Historic Civil Engineering Landmark by the American Society of Civil Engineers. It was the first major bridge to use manganese steel for its main arch ribs and in its rivets. Further, the innovative use of falsework (temporary scaffolding which upholds an unfinished span) precluded the need for heavy anchorages at the shore ends. It was the first time that falsework was used for the construction of an arch span of this magnitude.

STATISTICS

Opened to traffic	November 15, 1931
Length of arch span	1,675 feet
Length of New Jersey viaduct	3,010 feet
Length of Staten Island viaduct	2,010 feet
Total length of elevated structure	6,695 feet
Total length of bridge	5,780 feet
Width of bridge	85 feet
Number of traffic lanes	4 lanes
Width of roadway	40 feet
Channel clearance of bridge	
at mid-span	150 feet
Height of arch above water at crown	325 feet
Cost of original structure	\$13,000,000
Port Authority investment	
as of 12/31/98	\$ 114,698,000

1998 ANNUAL TRAFFIC VOLUMES - EASTBOUND

Typical Weekday Traffic	9,628
TOTAL ANNUAL TRAFFIC	2,993,353
Number of Toll Lanes	4

Facts Bayonne



Bridge Facts

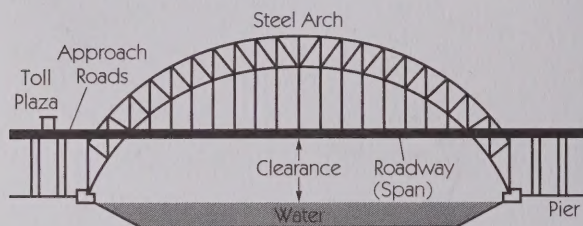
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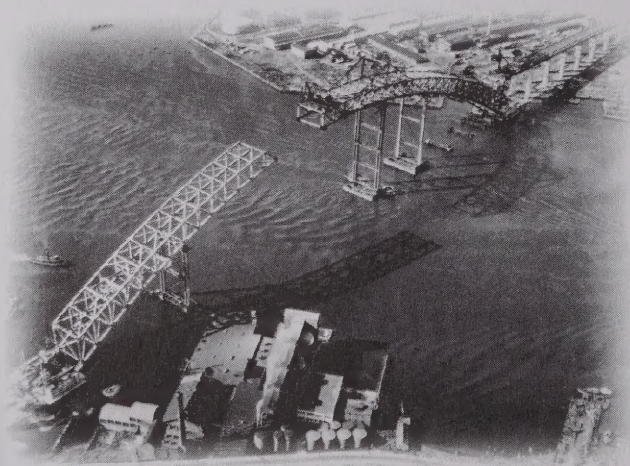
Facts Bayonne Bridge Facts

One of the longest steel arch bridges in the world, the Bayonne Bridge spans the Kill Van Kull to link Bayonne, New Jersey with the Port Richmond area of Staten Island, New York. It is one of the most spectacular bridges in the metropolitan area with a mid-span clearance of 150 feet that permits ocean-going vessels to use this entrance to Port Newark and the Elizabeth-Port Authority Marine Terminal without interference.



Steel Arch Bridge Profile

This bridge is an important part of the regional system of arterial highways. On Staten Island, it leads to the Verrazano-Narrows Bridge via the Martin Luther King, Jr. Expressway and the eastbound Staten Island Expressway (I-278). It also leads to the Goethals Bridge and Outerbridge Crossing via the westbound Staten Island Expressway.



The distinctive arch nearing completion



The Bayonne Bridge was awarded the prize for the most beautiful steel arch bridge of 1931 by the American Institute for Steel Construction. The design of the arch features a slender, slightly tapered hyperbolic curve over the roadway. The trusses of the arch are a pleasing pattern of repetitive regular triangles.



Designed by Port Authority Chief Engineer Othmar Ammann, the Bayonne Bridge is one of the three Staten Island Bridges linking New York and New Jersey

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